

SIX NEW SPECIES OF WEST INDIAN CHRYSOMELIDAE

(COLEOPTERA)

By DORIS H. BLAKE, *Washington, D. C.*

In this paper are described a half dozen new species of Chrysomelidae from the West Indies that have come to light in the collections at the Museum of Comparative Zoology and National Museum.

***Exochognathus limbatus* Blake**

(Fig. 5)

A female specimen of *Exochognathus limbatus* Blake¹ has recently been sent in from Rancho Mmndito, Sierra de los Organos, elevation 1,500 ft., Pinar del Rio Province, Cuba, collected 26 May 1946 by S. C. Bruner and J. Acuña. Since, at the time it was described, the species was known only from a single male, and since the female differs so markedly from the male in having greatly developed nodules and excrescences on the shoulders, sides and apex as well as more definite costae on the apical half of the elytra, as is so frequently the case in eumolpid females, an illustration is here given, so that future workers may not be misled into describing the female of the species as another species.

***Dicoelotrachelus violaceus*, n. sp.**

(Fig. 2)

About 3 mm. in length, oblong, shining; antennae, head, thorax, scutellum and legs reddish or yellowish brown, elytra violaceous, under-surface brown; thorax with a deep transverse sulcus across the middle.

Head polished and with fine, scattered punctures, smoothly rounded over occiput, a transverse groove above the somewhat elevated frontal tubercles, interocular space over half the width of the head; eyes entire, lower front short, labrum small. Antennae extending below the humeri but not to the middle of the elytra; except for the second joint, the joints subequal. Prothorax about twice as wide as long, with rounded sides and a small tooth at the basal angle; an impressed line all around sides and a transverse median groove almost across the thorax, ending on either side in a shallow pit; surface polished, very finely and sparsely punctate except in the sulcus where the punctures are coarser and denser. Elytra polished, distinctly but not coarsely punctate in basal portion, less distinctly at apex; epipleura ending at the middle of the elytra. Body beneath deeper reddish brown, shining, legs pale. First tarsal joint long, claws with a long basal tooth, almost bifid. Length 2.8-3 mm.; width 1.3 mm.

Type.—Male, and one paratype, M.C.Z. Type No. 27790.

¹Blake, Proc. Ent. Soc. Wash., 48, (5):116, 1946.

Type locality.—Ponce, Puerto Rico, collected 2 Oct. 1934 by R. G. Oakley, from the collection of Stuart T. Danforth, Museum of Comparative Zoology.

Remarks.—This is closely related to *Dicoelotrachelus glaber* Blake from the Dominican Republic. That species has bright green elytra and is more heavily punctate.

Chthoneis hispaniolae, n. sp.

(Fig. 4)

About 6 mm. in length, elongate, shining piceous with irregularly shaped pale spots arranged transversely, one set before, the other behind the middle of the elytra, apex pale; femora in part and the body beneath paler brown; thorax transverse, surface uneven, with a median basal depression and two small roundish elevations anteriorly, punctate; elytra also uneven and irregularly rugose, with fine punctures; antennae extending to the middle of the elytra.

Head smooth and shining over occiput with a large puncture on either side near the eye and above the frontal tubercles; frontal tubercles well marked by a groove between and above; a slight carina between antennal bases, labrum long, mandibles heavy, eyes entire with interocular space about half the width of head. Antennae not extending below the middle of the elytra (in female at least), slender, dark and shining, 4th joint longest, nearly twice as long as 3rd, remainder subequal. Prothorax small, considerably wider than long, not very convex and almost rectangular, with thickened angles, a narrow impressed line all around the margin, surface shining, distinctly and not densely punctate, with a shallow median depression in basal half and a pair of small roundish elevations, scarcely tubercles, anteriorly. Elytra wider than thorax and nearly five times as long, moderately convex with small humeri; surface fairly densely but not coarsely punctate, uneven, with irregular transverse wrinkling, shining piceous with two sets of spots, irregularly shaped, one before and the other behind the middle, the latter almost forming a pale transverse fascia, apex also pale. Epipleura becoming indistinct soon after the middle of elytra. Body beneath somewhat paler brown, shining, nearly glabrous; anterior coxae very narrowly separated by a thin produced carina. Legs with the femora paler on top, and dark and very pubescent tibiae and tarsi, the first tarsal joint very long, claws appendiculate. Length 6.1 mm.; width 2.6 mm.

Type.—Female, M.C.Z. Type No. 27791.

Type locality.—Constanza to Jarabocoa, elevation 2-4,000 ft., Dominican Republic, collected in August 1938 by P. J. Darlington.

Remarks.—Although considerably larger, this species bears a certain likeness to the only other species of *Chthoneis* at present known from the West Indies, *Chthoneis insulana* Blake, from Cuba. Both are dark piceous and with a pale

apex to the elytra, but the Cuban species has also a pale head and thorax. Both these species, unlike the South American ones, have antennae which do not come below the middle of the elytra. Otherwise they agree very well with the generic description.

***Glyptobregma bruneri*, n. sp.**

(Fig. 3)

About 2 mm. in length, oblong oval, shining yellowish brown with piceous antennae; aedeagus forked at tip.

Head with interocular space about half its width, front with a small pit-like depression above antennal sockets and the usual sulcus, in this species made up of a row of coarse punctures around the inner side of the eye; lower front short; antennae extending about to the middle of the elytra, piceous with paler basal joints. Prothorax over twice as wide as long at the base, narrowed anteriorly, basal margin sinuate over the scutellum, disk with irregularly placed, coarse, deep and not very dense punctures, an impressed line of punctures along the basal margin. Elytra with deeply impressed, striate punctation but not really costate, the punctures becoming finer towards apex; a well marked basal callosity on each elytron with a depression below; epipleura extending to the apical narrowing. Body beneath yellow brown, shining, very lightly pubescent, legs pale, tibiae faintly sulcate, the usual spur at apex of hind tibiae, claws toothed at the base. Length 2.2 mm.; width 1.2 mm.

Type.—A male, U.S.N.M. Cat. No. 58658.

Type locality.—Buenos Aires, Trinidad Mts., elevation 2,350-2,800 ft., Cuba, collected 4 May 1932 by S. C. Bruner and A. Otero.

Remarks.—This is the tiniest species of the genus yet to be described. It is of a brownish coloration similar to the other yellow brown species and is superficially similar to *G. turquinense* Blake, although smaller. As is not the case in the truly costate species, *G. clathrum* Suffrian and *puertoricense* Blake, the elytral punctures are single and not at all geminate, although there is some tendency towards that condition occasionally. The aedeagus is remarkable in the shape of the tip, being forked like a fish tail, a shape such as I have never before seen in chrysomelid beetles, although Dr. E. A. Chapin has shown me something similar but not so widely forked in a coccinellid beetle.

***Glyptobregma orphninum*, n. sp.**

(Fig. 1)

About 2.5 mm. in length, oblong ovate, reddish brown to piceous,

often with a bronzy lustre, with paler legs and antennae, very shiny, thorax irregularly and elytra striately punctate.

Head with interocular space half its width, rounded and polished over occiput, a deep depression above antennal bases and below the tubercles, and a groove running up on the inner side of the eye. Antennae extending to the middle of the elytra, pale, third joint almost as long as fourth, remainder subequal. Prothorax at base over twice as broad as long, narrowed anteriorly with almost straight sides, basal margin deeply sinuate over the scutellum; surface shining and with irregular, not very dense punctures, a rather deeply impressed group of punctures on either side near the margin. Elytra smoothly convex with a distinct but not large basal callosity and a slight depression below this, the rows of striate punctures rather deeply impressed. Epipleura becoming indistinct before apex. Body beneath paler yellowish brown, shining, finely pubescent. Tibiae with the usual slight sulcus and hind tibiae with spur, first tarsal joint of hind tarsi as long as the next two. Length 2.5 mm.; width 1.4 mm.

Type.—Male and 4 paratypes, M.C.Z. Type No. 27792. 1 paratype in the U.S.N.M. Cat. No. 58727.

Type locality.—Whitfield Hall, Blue Mts., circa 4,500 ft. elevation, Jamaica, collected in August 1930 by P. J. Darlington.

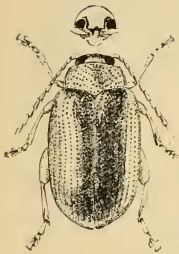
Remarks.—This, the first *Glyptobregma* to be described from Jamaica, is considerably smaller than the Cuban species. It is close to *G. turquinense* Blake, being of similar coloration and with well spaced eyes. The head is not so long and has a deep groove across the front, unlike that of *turquinense*. Three other specimens, all females, a little larger and deep piceous in coloring with fainter and finer elytral striae, have been doubtfully placed under this name, but may not be the same. They were collected at the same time and place as *G. orphninum* specimens.

***Glyptobregma aeneum*, n. sp.**

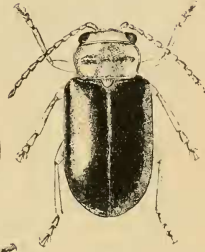
(Fig. 6).

Nearly 3 mm. in length, oblong oval, lustrous, reddish or yellowish brown, the elytra aeneous green, the thorax having a slight tinge of aeneous near the base.

Head with interocular space about half its width, the usual pit-like depression above the antennal sockets and a sulcus around the inner side of eye, in this species not close until along the top of the eye. Antennae of the usual proportions, scarcely reaching the middle of the elytra (in female specimen). Prothorax twice as wide as long at base, narrowed anteriorly, rather convex and smoothly rounded, the usual sinuation over the scutellum and an impressed line of punctures along the basal margin. Punctuation on disk scattered, irregular, coarse but not very dense. Elytra rather convex, with a basal callosity and a



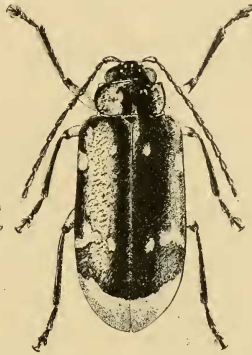
1. *Glyptobregma cyphium*



2. *Dicoelotrachelus violaceus*



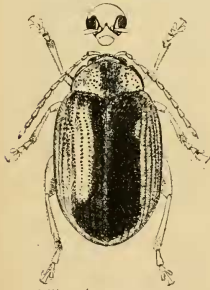
3. *Glyptobregma bruneri*



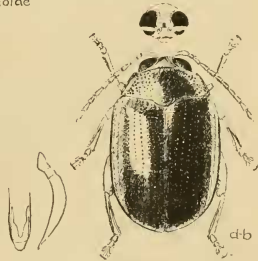
4. *Chthoneis hispaniolae*



5. *Exochognathus limbatus* ♀



6. *Glyptobregma aeneum*



7. *Glyptobregma cyaneolum*

PLATE 12.

Adults and male genitalia of West Indian Chrysomelidae.

slight transverse depression below this; the rows of striate punctures well marked but becoming finer and less impressed at the apex, sometimes with a slight tendency towards gemination as in the larger, costate, yellow brown species; a trace of fine punctures between the coarse striate rows. Epipleura becoming very narrow at apical angle. Body beneath yellow brown, nearly glabrous, tibiae with very short and shallow sulcus near the apex, first joint of hind tarsi long, claws at base toothed. Length 2.7 mm.; width 1.6 mm.

Type.—Female, M.C.Z. Type No. 27793.

Type locality.—Loma Vieja, south of Constanza, about 6,000 ft. elevation, Dominican Republic, collected in August 1938 by P. J. Darlington.

Remarks.—This species with lustrous green elytra is the first to be reported from Hispaniola.

***Glyptobregma cyanelum*, n. sp.**

(Fig. 7)

From 2 to 3 mm. in length, broadly oblong oval, lustrous blue violet or sometimes with a blue green thorax, the antennae, lower part of face, legs and undersurface brownish or yellowish; thorax at the base about the same width as the elytra.

Head with interocular space about a third of its width, upper part of head from tubercles up shining blue or green, lower part of head and antennae reddish brown, occiput and front finely punctate, a small depression over antennal sockets and a sulcus along inner margin of eyes, lower front short. Antennae not reaching the middle of the elytra, usually pale brown, third joint not so long as fourth, joints five to eleven subequal. Prothorax over twice as wide as long at base, and approximately as wide as the elytra at base, narrowed anteriorly, not very convex, basal margin sinuate over scutellum, surface lustrous, finely and rather densely punctate. Elytra broad, moderately convex, without distinct depressions or elevations, the rows of striate punctures not coarse and becoming at apex somewhat indistinct, on sides more deeply impressed, a very fine indistinct row of punctures between the coarser rows. Epipleura disappearing before the apex. Body beneath reddish or yellowish brown, very finely pubescent, tibiae faintly sulcate almost their entire length, a spur at the tip of the hind tibiae; claws toothed at base. Length 2.2-3.3 mm. width 1.3-1.8 mm.

Type.—A male, U.S.N.M. Cat. No. 58659, 28 paratypes. 2 in M.C.Z.

Type locality.—Ponce, Puerto Rico, collected on leaves of *Serjania polyphylla* by R. G. Oakley, 3 Nov. 1933, and also on the leaves of *Dioscorea* sp. and on *Eugenia* sp. Also collected at Adjuntas, Puerto Rico, by R. G. Oakley, in August 1933. this specimen in the Stuart T. Danforth collection at the Museum of Comparative Zoology.

Remarks.—This species is similar to Suffrian's *G. robustum* in coloration except that Suffrian described the outside of the legs of *robustum* as being also steely blue. The two Cuban specimens that I have rather doubtfully identified as *robustum* are twice as large as this little Puerto Rican species and much more heavily punctate.

THE SARCOPHAGIDAE OF GUAM

(DIPTERA)

BY DAVID G. HALL and GEORGE E. BOHART,

U. S. Department of Agriculture,

Bureau of Entomology and Plant Quarantine

Six species of Sarcophagidae occur on Guam, largest of the Marianas Islands, in the western Pacific. Five of these species are widely distributed in the Pacific Ocean areas. Two have not been described hitherto.

Shortly after the attack on Guam early in August 1944, the fly population there was so great that it became essential to inaugurate various control measures. Human and animal remains were heavily blown by various species of muscoid flies and it was necessary to poison the corpses and carcasses with sodium arsenate. *Chrysomya rufifacies* (Macq.) and *Sarcophaga dux* Thom. were the species most involved in the blowing, but *S. ruficornis* (Fabr.) was also frequently reared from such remains.

Human excrement deposited on the open ground was also a source of many flies. *Chrysomya megacephala* (Fabr.), normally a breeder in latrines, as well as *Sarcophaga knabi* Park., *S. peregrina* (R.D.), and *S. dux*, were frequently reared from this type of refuse.

Other muscoid flies, particularly those of the genus *Musca*, made life miserable for everyone. *Musca* flies swarmed everywhere. No single species of insect, even mosquitoes, caused so much complaint among the men as did *Musca sorbens* Wied., a most persistent, though nonbiting fly.

The aerial distribution of approximately 30,000 gallons of 5-percent DDT solution in fuel oil over Army installations and their surroundings by means of C-47 type cargo-carrying aircraft in October and November 1944 so reduced the entire fly population that it became nonprofitable for several months thereafter to collect them in treated areas either by trap or by hand net. In September and October 1945 the entire island was sprayed again in the same manner with the same formula, with similar results.

This island was visited by the senior author a number of times during the 14-month period from August 1944 through